

COLOR-CORRECTED LASER ILLUMINATION SYSTEM FOR NIGHT VISION APPLICATIONS

Abstract

A color-corrected lighting system for night vision applications includes a near infrared light source and a thin-sheet optical element disposed a distance from the near infrared source. The optical element includes an input surface for receiving light from the near infrared source and an output surface for emitting the received light in a desired emission pattern. The system also includes a visible, non-red light source in the form of a plate having a plurality of non-red LEDs arranged thereon. The plate is proximate a surface of the optical element such that the output surface of the optical element emits the visible light to mask the emitted near infrared light. A camera is adapted to receive the near infrared light from the near infrared light source reflected off an object within a camera field of view, and a display images objects detected within the camera field of view.